

NODC Ocean Data Archives and Metadata

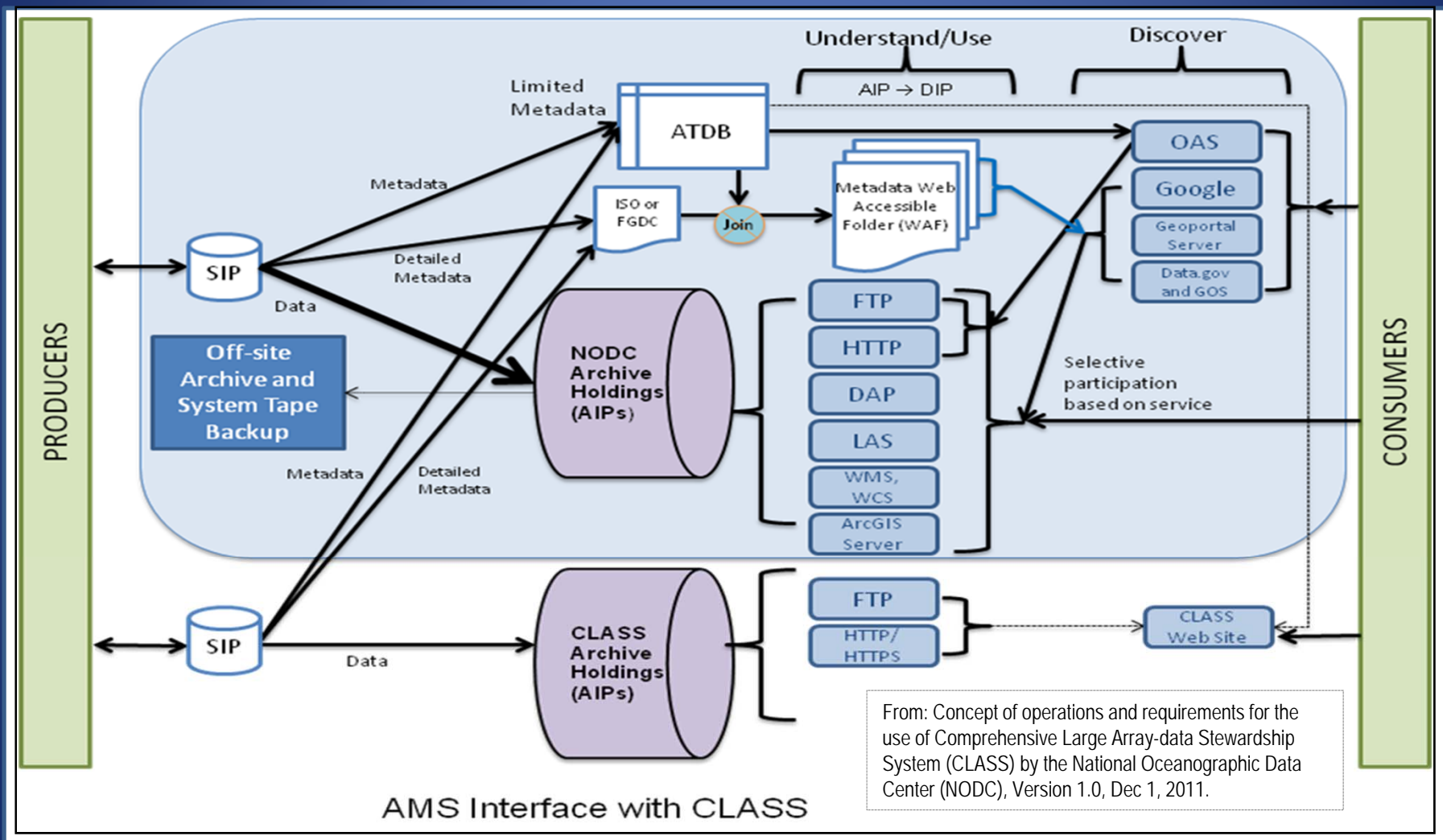
Don Collins

NOAA/National Oceanographic Data Center

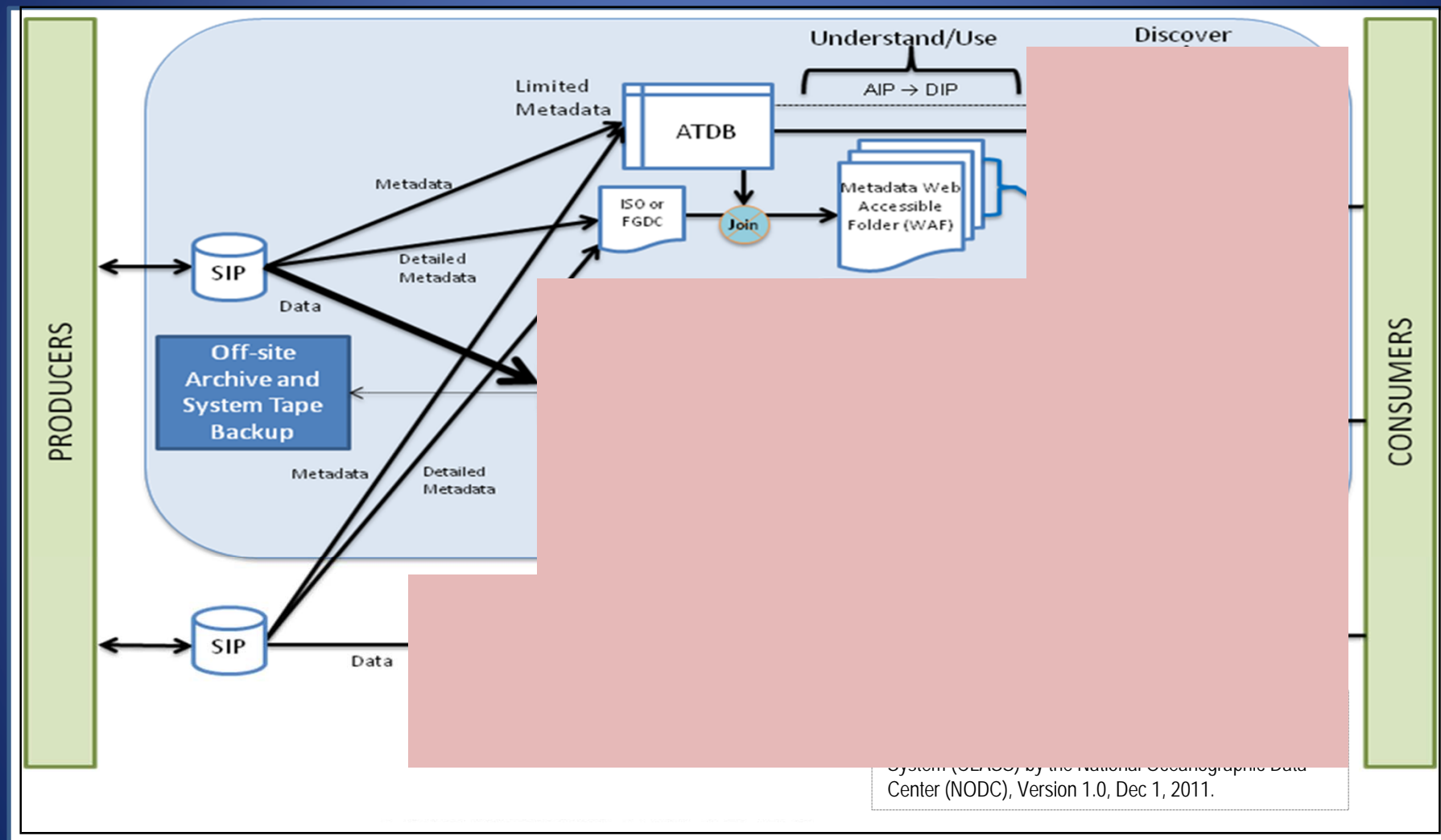
NODC Archive Management System: Diverse holdings of ocean data and information

- NODC scope generally includes
 - Global deep ocean to inland coastal waters and Great Lakes
 - Physical, chemical, biological *in situ* observations
 - Space-based ocean observations and products
 - Ocean model outputs, ecosystems analyses...
 - Photo collections, video collections...
- “NOAA Procedure for Scientific Records Appraisal and Archival Approval: Guide for data managers”

Format-agnostic data stewardship



SIP Ingest and AIP Metadata



Standards-oriented metadata for heterogeneous data

NODC
National Oceanographic Data Center

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AMS: Search Accession Preferences:

Accessions | **People** | Projects | Institutions | Countries | Platforms | Seenames | Datatypes | Instruments | Observations

Preferences | Reports | Search

Advanced Search: Choose the fields you would like to include in your search, and then press Continue below.

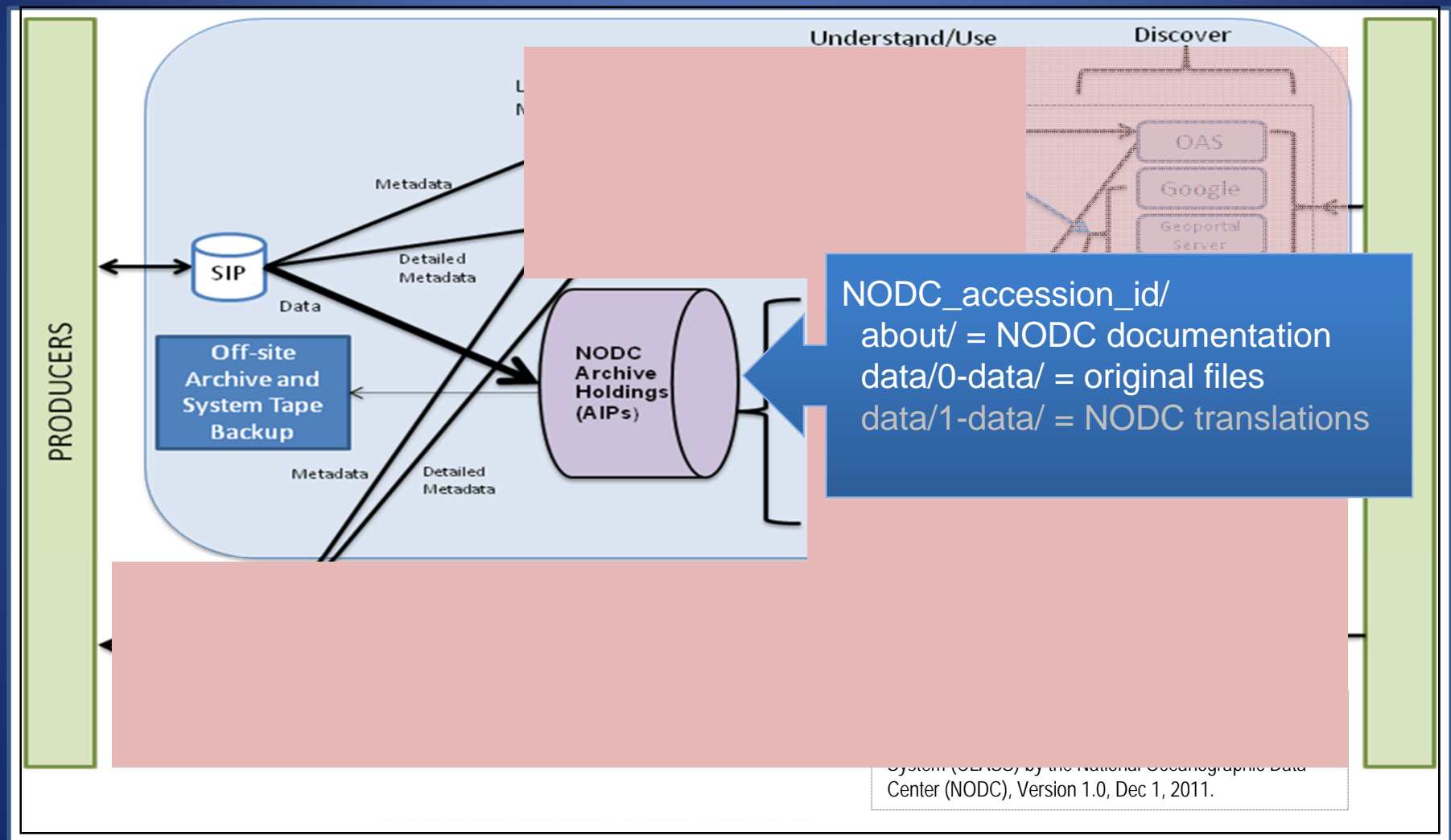
data	location	time
<input type="checkbox"/> accessions_id	<input checked="" type="checkbox"/> Seenames	<input type="checkbox"/> Date received
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<input checked="" type="checkbox"/> Abstract	<input checked="" type="checkbox"/> East boundary	<input checked="" type="checkbox"/> End date
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<input checked="" type="checkbox"/> Collecting institutions		
<input checked="" type="checkbox"/> Contributing projects		
<input checked="" type="checkbox"/> Platforms		
<input type="checkbox"/> NODC contact		
<input type="checkbox"/> Disposition		
<input type="checkbox"/> Current status		
<input type="checkbox"/> Custodian		
<input type="checkbox"/> Metadata quality		
<input type="checkbox"/> Metadata version		
<input type="checkbox"/> Keyer		
<input type="checkbox"/> Editor		

Work in progress...

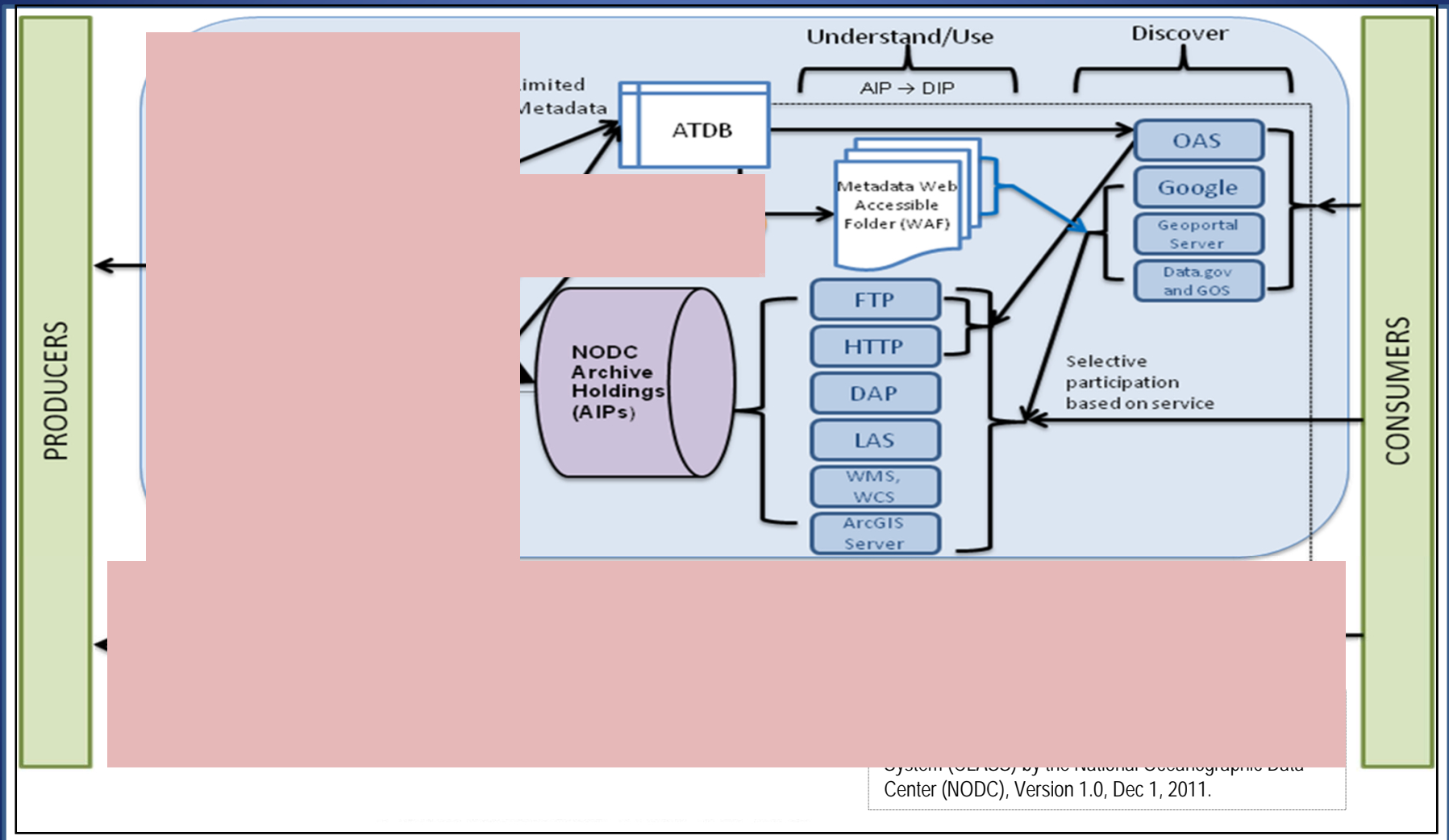
XML_blob element to manage additional metadata that does not have an existing ATDB element.

NODC Metadata Workshop, 14-16 Aug 2012

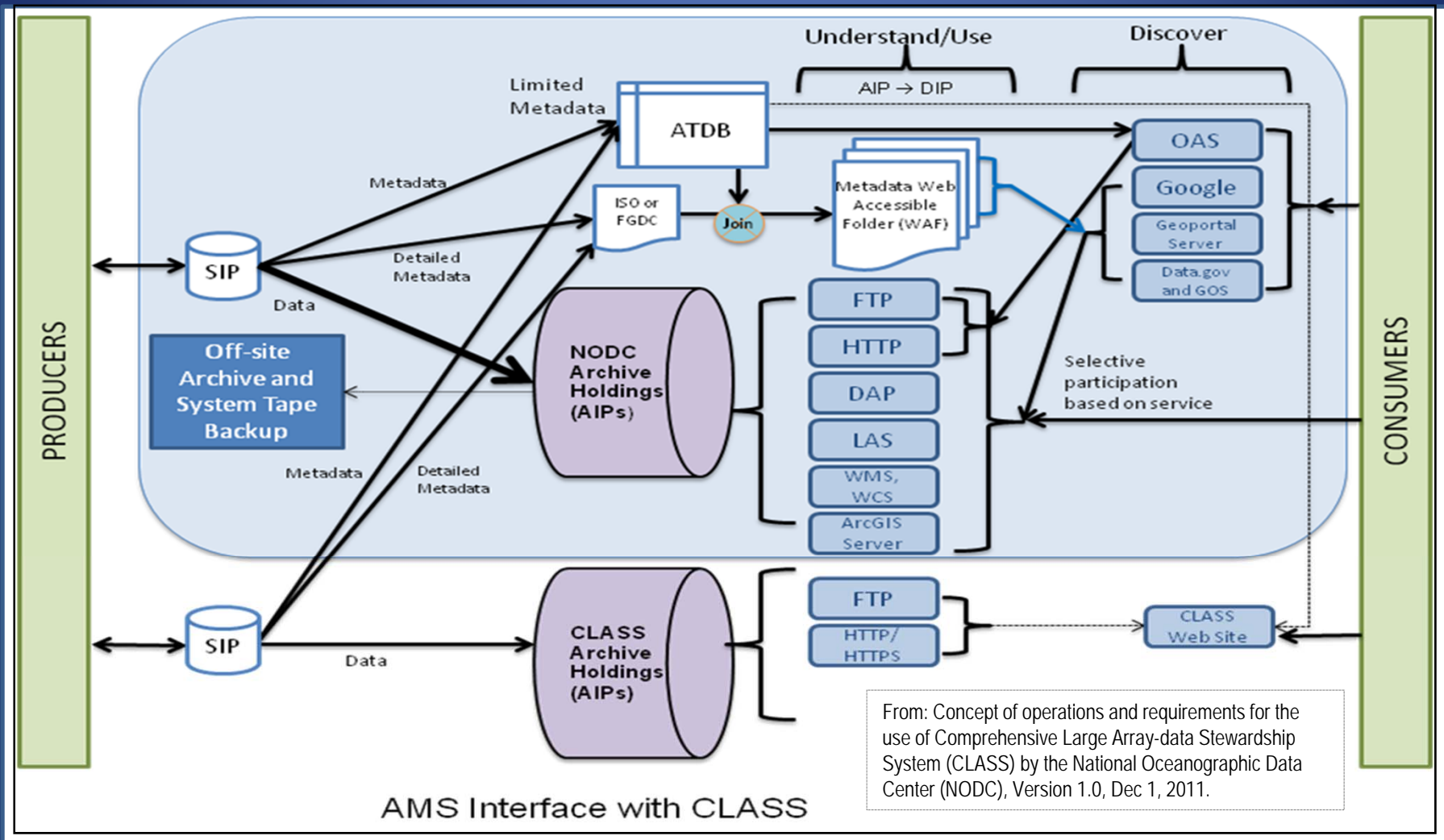
AIPs in *canonical form*



DIP Discovery and Access

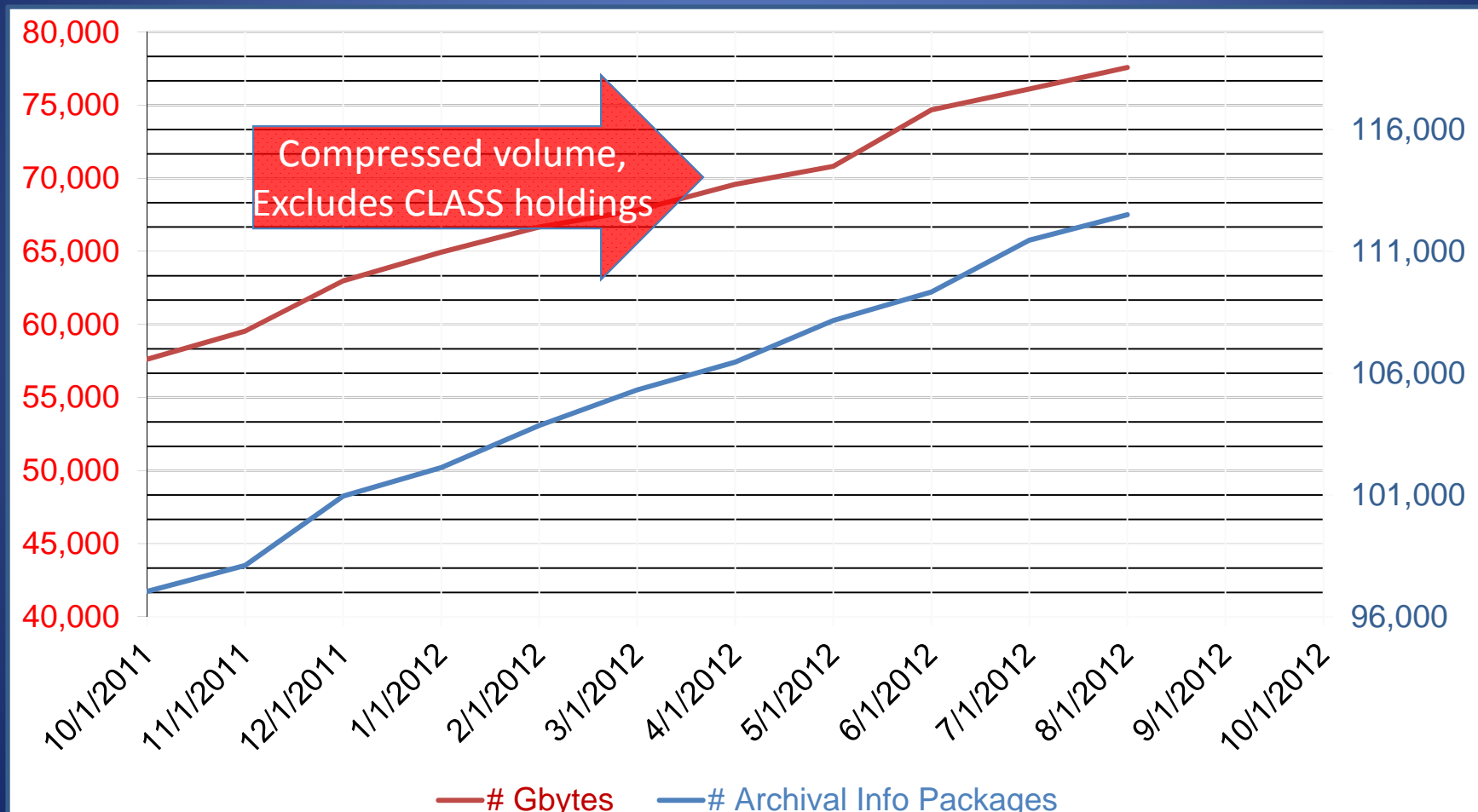


Ongoing NODC-CLASS coordination



Diverse holdings continue to grow

NODC Archival Holdings Trend -- FY2012



Automated ingest:

Higher volume, lower diversity

- NODC Submission Information Form describes *automated, recurring* data submissions
 - Average **about 17,200 new AIPs per year**
 - Require sufficient details to enable automated acquisition and ingest
 - At least 15 operational automated ingest processes
 - BCO-DMO, NCEP WAVEWATCH III® and COFS/ROFS , GHRST
 - *In prep* data acquisition automation efforts include
 - UC Davis Bodega Marine Lab
 - NWS/National Data Buoy Center

Non-automated ingest: lower volume, higher diversity

- Non-automated SIPs require *different levels of manual scrutiny* and ingest processing
 - Non-repeating, single time data submissions, highly variable types of data, metadata, formats, etc.
 - Average about **240 new AIPs per year**
 - Recommend metadata documentation guidance
 - NODC/NCDDC-developed MERMAid metadata editor and ISO transforms, ISO training courses
 - GEO-IDE and NGDC wiki guidance
 - NODC Electronic Data Documentation Form – elements map to FGDC elements
 - **Online Submission System** is in prep for Fall 2012 release

File-level metadata and data standards

- Encourage data providers to **use netCDF for data**
 - NODC-developed netCDF templates for various types of geospatial data
 - <http://www.nodc.noaa.gov/data/formats/netcdf/>
- Encourage data providers to **use CF and ACDD metadata conventions in netCDF files**
 - Use ncISO to extract ISO metadata from netCDF files in AIPs
- Encourage FGDC or ISO format metadata for all SIPs
- **Provide** an FGDC formatted metadata record for all AIPs in Web Accessible Folders for discovery and access

Metadata Golden Rule: Provide as much metadata for others as you wish others would provide for you!

Thanks! Questions?

Donald.Collins@noaa.gov
301.713.3272 x154

Archive data at NODC

See <http://www.nodc.noaa.gov/General/NODC-Submit/>
or

Send email to NODC.DataOfficer@noaa.gov

Find data at NODC

See <http://data.nodc.noaa.gov/geoportal/>
or

Send email to NODC.Services@noaa.gov